

2. (Amended) The [I]inhibitor [as in]of claim 1, [characterized in that]wherein said inhibitor inhibits enzymes selected from the group consisting of: cellulase, endoxylanase, β -glucanase, β -xylosidase, and α -L-arabinofuranosidase [and/or other cellulose, xylan, arabinoxylan or β -glucan degrading enzymes].

3. (Amended) The [I]inhibitor [as in]of claim 1 [or 2, characterized in that it] wherein said inhibitor is obtainable from plant material or fractions thereof.

4. (Amended) The [I]inhibitor [as in]of claim 3, [characterized in that] wherein said plant material is selected from the group consisting of cereals, cereal grains from wheat, [or] cereal flours from wheat, durum wheat, rye, triticale, barley, sorghum, oats, maize [or]and rice.

5. (Amended) The [I]inhibitor [as in]of claim 1 [or 2, characterized in that it] wherein said inhibitor is obtainable from micro-organisms or fractions thereof.

6. (Amended) The [I]inhibitor [as in any of the] of claim[s] 1 [-5, characterized in that it] wherein said inhibitor is a xylanase inhibitor.

7. (Amended) The [I]inhibitor [as in]of claim 6, [characterized in that it] wherein said inhibitor is [a] water-soluble [species].

8. (Amended) The [I]inhibitor [as in]of claim 7 comprising[having a marker whose]an amino acid sequence [has more than]at least 70% [homology with] homologous to [SEQ ID No. 1 and/or SEQ ID No. 2]SEQ ID NO:1 or SEQ ID NO:2.

9. (Amended) The [I]inhibitor [as in]of claim 8, [characterized in that] wherein the [marker]amino acid sequence is the N-terminal amino acid sequence of the protein or glycoprotein.

10. (Amended) The [I]inhibitor [as in]of claim 8 [or 9 having] comprising [a marker for which]an amino acid sequence [has more than]at least 85% [homology with]homologous to [SEQ ID No. 1 and/or SEQ ID No. 2]SEQ ID NO:1 or SEQ ID NO:2.

11. (Amended) The [I]inhibitor [as in]of claim 10, [characterized in that] wherein the [marker]amino acid sequence is the N-terminal amino acid sequence of the protein or glycoprotein.

12. (Amended) The [I]inhibitor [as in]of claim 7, comprising[having a marker whose amino acid sequence is identical to SEQ ID No. 1 and/or SEQ ID No. 2]SEQ ID NO:1 or SEQ ID NO:2.

13. (Amended) The [I]inhibitor [as in]of claim 12, [characterized in that] wherein [the marker] SEQ ID NO:1 or SEQ ID NO:2 is the N-terminal amino acid sequence of the protein or glycoprotein.

14. (Amended) The [I]inhibitor [as in any of the] of claim[s] 7 [to 13, characterized in that] wherein said protein or glycoprotein is selected from the group [comprising] consisting of proteins or glycoproteins having a molecular weight [typically] between approximately 40 kDa and 43 kDa, proteins or glycoproteins having a molecular weight [typically] of approximately 30 kDa and proteins or glycoproteins having a molecular weight of [typically] approximately 10 kDa.

15. (Amended) The [I]inhibitor [as in any of the] of claim[s] 7 [to 14, characterized in that] wherein said protein or glycoprotein [typically] has a molecular weight between approximately 40 kDa and 43 kDa and has a pI of greater than about 7.

16. (Amended) A [M]method for obtaining the inhibitor [as in]of [any of the] claim[s] 1 [to 15] from [possibly genetically modified] micro-organisms, plants or plant materials, [wherein said micro-organisms, plants or plant materials are] comprising subject[ed]ing said micro-organisms, plants, or plant materials to one or more extraction and/or fractionation steps.

17. (Amended) A [M]method for obtaining the inhibitor [according to any of the] of claim[s] 1 [to 15, wherein] comprising genetically modifying micro-organisms, plants or plant materials [are genetically modified] by the introduction of a genetic material encoding said inhibitor into the micro-organisms, plants or plant materials.

18. (Amended) A [P]process for transforming micro-organisms, plants or plant materials, [wherein] comprising reducing the activity of the inhibitor [according to any of the] of claim[s] 1 [to 15 is reduced].

19. (Amended) The [P]process according to claim 18, [characterized in that] wherein the [reduced] activity of the inhibitor [according to the invention is obtained]is reduced by reduction of its expression.

20. (Amended) The [P]process according to claim 18 [or 19, characterized in that] wherein the activity of the inhibitor is reduced by blocking the inhibitor function.

21. (Amended) A [P]process for transforming micro-organisms, plants or plant materials, [wherein]comprising increasing the activity of the inhibitor according to [any of the] claim[s] 1 [to 15 is increased].

22. (Amended) The [P]process according to claim 21, [characterized in that] wherein the [increased] activity of the inhibitor [according to the invention is obtained] is increased by an increase of its expression.

23. (Amended) The [P]process according to claim 21 [or 22, characterized in that] wherein the activity of the inhibitor is increased by activating the inhibitor function.

24. (Amended) A [M]micro-organism[s], plants or plant material[s] obtained by the method according to [any of the preceding]claim[s] 17 [to 23].

25. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants and/or the plant materials according to claim 24]A method for improving the production of beer or the malting of cereals [such as barley, sorghum and wheat and/or the production of beer] comprising; adding the inhibitor of Claim 1 to the cereal malt.

26. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 24, the micro-organisms, the plants or the plant materials according to claim 24]A method for improving the production and/or quality of baked or extruded cereal products [chosen among the group consisting of straight dough, sponge dough, Chorleywood bread, breakfast cereals, biscuits, pasta and noodles]comprising adding the inhibitor of claim 1, before baking, to the baked or extruded cereal product.

27. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24]A method for improving animal feedstuff efficiency comprising adding the inhibitor of claim 1 to the animal feedstuff.

28. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 15, the micro-organisms, the plants or the plant materials according to claim 24]A method for improving the production of starch derived products selected from the group consisting of: syrups, sorbitol, xylose and[/or] xylitol; comprising adding the inhibitor of claim 1 to the starch derived products.

29. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24] A method for wheat gluten-starch separation and production comprising adding the inhibitor of claim 1 to the wheat gluten-starch mixture.

30. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24] A method for improving maize processing comprising adding the inhibitor of claim 1 to the maize.

31. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24] A method for improving plant disease resistance comprising adding the inhibitor of claim 1 to the plant.

32. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24] A method for improving nutraceutical and/or pharmaceutical applications comprising adding the inhibitor of claim 1 to the nutraceutical and/or pharmaceutical.

33. (Amended) [Use of the inhibitor according to any of the preceding claims 1 to 15 or obtained by the method of claim 16, the micro-organisms, the plants or the plant materials according to claim 24] A method for improving paper and pulp technologies comprising adding the inhibitor of Claim 1 to said paper and pulp mixtures during production of said paper and pulp.

Please add the following claims:

34. The method of Claim 16 wherein said micro-organisms, plants or plant materials are genetically modified.

35. A method for improving the production of beer or the malting of cereals comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24 to said cereal malt.

36. The method of Claim 35 wherein said cereals are selected from the group consisting of: barley, sorghum and wheat.

37. The method of Claim 25 wherein said cereals are selected from the group consisting of: barley, sorghum and wheat.

38. A method for improving the production and/or quality of baked or extruded cereal products comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, before baking, to the baked or extruded cereal product.

39. The method of Claim 26 wherein said cereal products are selected from the group consisting of straight dough, sponge dough, Chorleywood bread, breakfast cereals, biscuits, pasta and noodles.

40. A method for improving animal feedstuff efficiency comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24 to the animal feedstuff.

41. A method for improving the production of starch derived products selected from the group consisting of: syrups, sorbitol, xylose and xylitol: comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to the starch derived products.

42. A method for wheat gluten-starch separation and production comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to the wheat gluten-starch mixture.

43. A method for improving maize processing comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to the maize.

44. A method for improving plant disease resistance comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to the plant.

45. A method for improving nutraceutical and/or pharmaceutical applications comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to the nutraceutical and/or pharmaceutical.

46. A method for improving paper and pulp technologies comprising adding the inhibitor obtained from the microorganisms, the plants or the plant material of claim 24, to said paper and pulp mixtures during production of said paper and pulp.

47. The method of claim 31 wherein said inhibitor is added by transforming the plant cells with a vector expressing said inhibitor.

IN THE SEQUENCE LISTING:

[Please insert the attached Sequence Listing page 1.]

REMARKS